



Carroll D. Besadny
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

November 24, 1992

Mr. Virgil Kreder
President
Red Arrow Products Company, Inc.,
P.O. Box 1537
Manitowoc, WI 54221-1537

IN REPLY REFER TO: 4530-1

RECEIVED
DEC 01 1992

AIR TOXICS AND RADIATION
BRANCH
U.S. EPA, REGION V

Dear Mr. Kreder:

Your application for an air pollution control construction permit has been processed in accordance with sec. 144.392, Wis. Stats.

The enclosed construction permit is issued to provide authorization for your source to modify an existing source. The modification is to construct and operate six calciners and two rapid pyrolysis reactors, dry products process line, LBF process line and grillin process line and construct and operate a new 350 B.H.P. boiler in accordance with the requirements and conditions set forth within Parts I and II of the permit. This permit expires 18 months after the day this permit is issued. This source cannot operate after this construction permit expires unless you have been issued an operation permit.

Enclosed with the permit there are two copies of a bill for the cost of reviewing and acting upon your air pollution control permit. This bill is due and payable within 30 days of the date of the issuance of the permit. Your check should be made payable to Wisconsin Department of Natural Resources and returned to the address on the bill. Please include one copy of the bill with your payment.

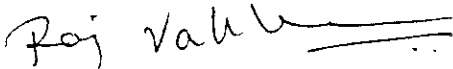
A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the Lake Michigan District Air Program, 1125 North Military Avenue, P.O. Box 10448, Green Bay, WI 54307, Phone (414) 492-5880

NOTICE OF APPEAL RIGHTS

This decision is effective immediately unless the permit holder appeals the permit as set forth herein.

Any person aggrieved by this decision may appeal this decision by serving a petition for a contested case hearing for administrative review of this decision on the Secretary of the Department of Natural Resources under section 144.403, Stats., within 30 days after the date of mailing of this decision. Any petition for a contested case hearing under section 144.403, Stats., shall set forth specifically the issue sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired. This notice is provided pursuant to section 227.48(2), Stats.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

A handwritten signature in dark ink, appearing to read "Raj Vakharia", with a horizontal line underneath.

Raj Vakharia, Review Engineer
Permit Section
Bureau of Air Management

Enclosure

cc: Air Enforcement Branch - EPA, Region V
Lake Michigan District

BEFORE THE DEPARTMENT OF NATURAL RESOURCES
AIR MANAGEMENT PROGRAM
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND DECISION

Findings of Fact

The Department of Natural Resources (DNR) finds that:

- 1) Red Arrow Products Company, Inc., 1226 South Water Street, Manitowoc, Wisconsin, has applied for an air pollution control construction permit. The authorized representative of the facility is Vigil Kreder, President.
- 2) Red Arrow Products Company, Inc., submitted an air pollution control permit application and plans and specifications and any additional information describing the air pollution source on May 19, 1992; May 28, 1992; June 1, 1992; June 2, 1992; June 3, 1992; June 15, 1992; June 22, 1992; July 1, 1992; July 8, 1992; July 28, 1992; August 6, 1992; August 17, 1992; September 28, 1992; October 29, 1992; November 2, 1992; November 18, 1992.
- 3) DNR has reviewed Red Arrow Products Company, Inc.,'s air permit application and the plans and specifications submitted to DNR.
- 4) This permit is for a minor, attainment for sulfur dioxide, nitrogen oxides, carbon monoxide and non attainment for TSP, modified air pollution source.
- 5) DNR has complied with the procedures set forth in s. 144.392, Stats.
- 6) The proposed air pollution source meets all of the applicable criteria in s. 144.393, Stats.
- 7) DNR has complied with the requirements of s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.

Conclusions of Law

DNR concludes that:

- 1) DNR has authority under s. 144.31(1)(a), Stats., to promulgate rules contained in chs. NR 400-499, Wis. Adm. Code, including but not limited to rules containing emission limits, compliance schedules and compliance determination methods.
- 2) DNR has the authority under ss. 144.31(1)(a), (e), and (f), 144.375 (4) and (5) and 144.394, Stats., and chs. NR 400-499, Wis. Adm. Code, to establish emission limits for sources of air pollution.

- 3) DNR has the authority to issue air pollution control permits and to include conditions in such permits under ss. 144.391, 144.392, 144.393 and 144.394, Stats.
- 4) The emission limits included in this permit are authorized by ss. 144.394, Stats., and NR 428.03, 426.03, 431.05, 424.03(2)(b)1, 445.04(3), 429.03, 445.03, 419.03, Wis. Adm. Code.
- 5) DNR is required to comply with s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code, in conjunction with issuing an air pollution control permit.

Decision

Red Arrow Products Company, Inc., is authorized to modify an existing source as described in plans and specifications dated May 19, 1992; May 28, 1992; June 1, 1992; June 2, 1992; June 3, 1992; June 15, 1992; June 22, 1992; July 1, 1992; July 8, 1992; July 28, 1992; August 6, 1992; August 17, 1992; September 28, 1992; October 29, 1992; November 2, 1992; November 18, 1992 in conformity with the emission limits, monitoring, recordkeeping and reporting requirements and specific and general conditions set forth in this permit.

AIR POLLUTION CONTROL CONSTRUCTION PERMIT

ATTAINMENT FOR SO₂, NO_x, CO AND NONATTAINMENT FOR TSP MINOR SOURCE

EI FACILITY NO. 436 036 700

PERMIT NO. 92-RV-070

STACK NO.(S). S02-S09, S11, S12,
S13, S18, S14, S15,
S16, S17

TYPE: Construction

SOURCE NO.(S). P02, P03, P04, P05, B03

PERMISSION TO COMMENCE CONSTRUCTION ENDS EIGHTEEN (18) MONTHS FROM THE DAY THIS PERMIT IS ISSUED.

In compliance with the provisions of Chapter 144, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Red Arrow products Company, Inc.,

Street Address: 1226 S. Water Street
Manitowoc, Wisconsin 54221

Principal Officer or Authorized Representative, & Title:
Virgil Kreder, President

is authorized to modify an existing source described in the plans and specifications dated May 19, 1992; May 28, 1992; June 1, 1992; June 2, 1992; June 3, 1992; June 15, 1992; June 22, 1992; July 1, 1992; July 8, 1992; July 28, 1992; August 6, 1992; August 17, 1992; September 28, 1992; October 29, 1992; November 2, 1992; November 18, 1992 in conformity with the conditions herein.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Madison, Wisconsin, November 24, 1992

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By Donald F. Theiler *per*

Donald F. Theiler, Director
Bureau of Air Management

PART I
SPECIFIC PERMIT CONDITIONS

BY CATEGORY OF EMISSION UNIT(S)

A. Process #P02, Stacks #s S02-S09, S11, S12, S13, S18, Liquid Smoke Reactors

i) Natural gas combustion in six calciners and 2 RTP Processes, Stacks #s S02-S09, S11

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Nitrogen Oxides	sec. NR 428.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	2.48 pounds per hour
Carbon Monoxide	sec. NR 426.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	0.50 pound per hour
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity This limit applies to each stack
Particulates	sec. 144.394(3), Wis. Stats.	0.0007 pound per hour from stack #S02 0.0007 pound per hour from stack #S03 0.0007 pound per hour from stack #S04 0.002 pound per hour from stack #S05 0.002 pound per hour from stack #S06 0.002 pound per hour from stack #S07 0.002 pound per hour from stack #S08 0.002 pound per hour from stack #S09 0.002 pound per hour from stack #s11 See Note 1

Note 1

The applicable limitation for this source is set forth in sec. NR 415.06(2)(b), Wis. Adm. Code and is 0.50 pounds of particulate per million BTU heat input. This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

- ii) When vapor exhaust stream from the pyrolysis process are diverted to waste afterburner (C02), Stack #S12

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Particulates	sec. 144.394(3), Wis. Stats.	1.04 pound per hour See Note 1
Carbon Monoxide	sec. NR 426.03, Wis. Adm. Code & sec. 144.394(6), Wis. stats.	16.08 pounds per hour
Organic Compounds	sec. NR 424.03(2)(b)1, Wis. Adm. Code	85% control of organic compounds and 5.55 pounds per hour
Formaldehyde	sec. NR 445.04(3), Wis. Adm. Code	BACT and 0.40 pound per hour See Note 2
Nitrogen Oxides	sec. NR 428.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	4.05 pounds per hour
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity
Malodorous Emissions	sec. NR 429.03, Wis. Adm. Code	General Limitations See Note 3
Hazardous Emissions	sec. NR 445.03, Wis. Adm. Code	General Limitations See Note 4

Note 1

The applicable limitation for this source is set forth in sec. NR 415.06(2)(b), Wis. Adm. Code and is 0.50 pounds of particulate per million BTU heat input and in sec. NR 415.07(2)(a)2., Wis. Adm. Code and is 0.20 pound per 1,000 pounds of exhaust gas, corrected to 12 percent carbon dioxide. This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

Note 2

BACT for formaldehyde shall be defined to be control formaldehyde emissions using the waste afterburner having a minimum temperature of the oxidation chamber for the afterburner of 1500°F and residence time of 1 sec.

Note 3

No person shall cause, suffer, allow, or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate, or control such emissions.

Note 4

No person may cause, or allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration or durations to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 4 of sec. NR 445.04, Wis. Adm. Code

2. Other Conditions

- a. Red Arrow Products Company, shall monitor and record on a daily basis the temperature of the oxidation chamber for the afterburner. The minimum temperature of the oxidation chamber for the afterburner shall be at least 1500°F.
- b. Red Arrow Products Company shall keep the records required in permit conditions 2 a. for a period of three years and the records be made available to the Department personnel anytime during normal working hours.
- c. All the air pollution control equipment must be operated and maintained in conformance with all manufacturer's specifications and recommendations to prevent the violation of any emission limitation.
- d. Red Arrow Products Company, shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution.
- e. The rain hat will be removed from stack #S12, so as not to impede the vertical exit velocity of the exhaust.
- f. The three control devices (packed tower, condenser and plate tower), which are part of the pyrolysis process and are used in series to collect product (liquid smoke) and capture particulates, shall be operated at all the times during the production of liquid smoke. This condition is necessary to meet the particulate emission limits.

iii) When vapor exhaust stream from the pyrolysis process is directed to west waste fuel burner (C03) and baghouse (C04), Stack #S13

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Particulates	sec. 144.394(3), Wis. Stats.	0.90 pound per hour See Note 1
Carbon Monoxide	sec. NR 426.03, Wis. Adm. Code & sec. 144.394(6), Wis. stats.	15.10 pounds per hour
Organic Compounds	sec. NR 424.03(2)(b)1, Wis. Adm. Code	85% control of organic compounds and 5.5 pounds per hour
Formaldehyde	sec. NR 445.04(3), Wis. Adm. Code	BACT and 0.40 pound per hour See Note 2
Sulfur Dioxide	sec. NR 417.025, Wis. Adm. Code and sec. 144.394(6), Wis. Stats.	2.30 pounds per hour
Nitrogen Oxides	sec. NR 428.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	15.0 pounds per hour
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity
POM	sec. NR 445.03(1), Wis. Adm. Code	0.06 pound per hour and 249.9 pounds per year See Note 5
Malodorous Emissions	sec. NR 429.03(1), Wis. Adm. Code	General Limitations See Note 3
Hazardous Emissions	sec. NR 445.03, Wis. Adm. Code	General Limitations See Note 4

Note 1

The applicable limitation for this source is set forth in sec. NR 415.06(2)(b), Wis. Adm. Code and is 0.50 pounds of particulate per million BTU heat input and in sec. NR 415.07(2)(a)2., Wis. Adm. Code and is 0.20 pound per 1,000 pounds of exhaust gas, corrected to 12 percent carbon dioxide. This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

Note 2

BACT for formaldehyde shall be defined to be control formaldehyde emissions using the west waste fuel burner having a minimum temperature of the oxidation chamber for the afterburner of 1500°F and residence time of 1 sec.

Note 3

No person shall cause, suffer, allow, or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate, or control such emissions.

Note 4

No person may cause, or allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration or durations to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 4 of sec. NR 445.04, Wis. Adm. Code

Note 5

This limit is established in the permit 87-AJH-043 so that POM emissions are not subject to BACT

2. Other Conditions

- a. Red Arrow Products Company, shall monitor and record on a daily basis the temperature of the oxidation chamber for the west waste fuel burner. The minimum temperature of the oxidation chamber for the west waste fuel burner shall be at least 1500°F.
- b. Red Arrow Products Company shall monitor and record on a daily basis the pressure drop range across the baghouse. The pressure drop range across the baghouse shall be maintained at 1-6 inches w.g.
- c. Red Arrow Products Company shall keep the records required in permit conditions 2 a. and b. for a period of three years and the records be made available to the Department personnel anytime during normal working hours.
- d. All the air pollution control equipment must be operated and maintained in conformance with all manufacturer's specifications and recommendations to prevent the violation of any emission limitation.
- e. Red Arrow Products Company, shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution.
- f. Red Arrow Products Company shall restrict the fuel combusted by the burner here permitted to fuels comparable to the sawdust charcoal, wood tar, or odorous gaseous compounds generated at the Red arrow Products manufacturing facility on South Water Street. The combustion of other fuels must receive

written authorization from the Department prior to any such change in burner operation. This condition established in the permit 87-AJH-043.

- g. The waste fuel burners shall not emit more than 249.9 pounds of POM for any consecutive 12 months of burner operation. This condition established in the permit 87-AJH-043.
- h. The three control devices (packed tower, condenser and plate tower), which are part of the pyrolysis process and are used in series to collect product (liquid smoke) and capture particulates, shall be operated at all the times during the production of liquid smoke. This condition is necessary to meet the particulate emission limits.
- i. Red Arrow Products Company shall burn tar in the west waste fuel burner only when the thermal oxidizer (C07) malfunctions and is not operable.
- j. Red Arrow products Company shall install a flow monitor to monitor the tar input into the West waste Fuel Burner (C03).
- k. Compliance emission tests shall be conducted within 45 days after the start of initial operation to demonstrate compliance with the NO_x (outlet), formaldehyde (inlet and outlet) and CO (outlet) emissions on WWFB while operating at 100% capacity. If operation at 100% capacity is not feasible, the source shall operate at a capacity level which is approved by the Department in writing. If the compliance emission tests cannot be conducted within 45 days after the start of initial operation, the permit holder may request and the Department may approve in writing an extension of time to conduct the test(s). The Department shall be informed at least 20 working days prior to the tests so a Department representative can witness the testing. At the time of notification a compliance test plan following the provisions set forth in Section NR 439.07, Wis. Adm. Code, shall also be submitted for approval.

Two copies of the report on the tests shall be submitted to the Department for evaluation within 60 days after the tests. An operating permit will be issued only upon proof of compliance.

- l. This permit supersedes permit #87-AJH-043 and permit #87-AJH-043A.

- iv) When vapor exhaust from the pyrolysis process is diverted to the thermal oxidizer (C07) and baghouse (C08) Stack #S18

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Particulates	sec. 144.394(3), Wis. Stats.	0.37 pound per hour See Note 1
Carbon Monoxide	sec. NR 426.03, Wis. Adm. Code & sec. 144.394(6), Wis. stats.	16.48 pounds per hour
Organic Compounds	sec. NR 424.03(2)(b)1, Wis. Adm. Code	85% control of organic compounds and 5.57 pounds per hour
Sulfur Dioxide	sec. NR 417.025, Wis. Adm. Code and sec. 144.394(6), Wis. Stats.	0.94 pound per hour
Formaldehyde	sec. NR 445.04(3), Wis. Adm. Code	BACT and 0.40 pound per hour See Note 2
Nitrogen Oxides	sec. NR 428.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	5.63 pounds per hour
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity
Malodorous Emissions	sec. NR 429.03(1), Wis. Adm. Code	General Limitations See Note 3
Hazardous Emissions	sec. NR 445.03, Wis. Adm. Code	General Limitations See Note 4

Note 1

The applicable limitation for this source is set forth in sec. NR 415.06(2)(b), Wis. Adm. Code and is 0.50 pounds of particulate per million BTU heat input and in sec. NR 415.07(2)(a)2., Wis. Adm. Code and is 0.20 pound per 1,000 pounds of exhaust gas, corrected to 12 percent carbon dioxide. This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

Note 2

BACT for formaldehyde shall be defined to be control formaldehyde emissions using the thermal oxidizer having a minimum temperature of the oxidation chamber for the afterburner of 1500°F and residence time of 1 sec.

Note 3

No person shall cause, suffer, allow, or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate, or control such emissions.

Note 4

No person may cause, or allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration or durations to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 4 of sec. NR 445.04, Wis. Adm. Code

2. Other Conditions

- a. Red Arrow Products Company shall monitor and record on a daily basis the temperature of the oxidation chamber for the thermal oxidizer. The minimum temperature of the oxidation chamber for the thermal oxidizer shall be at least 1500°F.
- b. Red Arrow Products Company shall monitor and record on a daily basis the pressure drop range across the baghouse. The pressure drop range across the baghouse shall be maintained at 1-6 inches w.g.
- c. Red Arrow Products Company shall keep the records required in permit conditions 2 a. and b. for a period of three years and the records be made available to the Department personnel anytime during normal working hours.
- d. All the air pollution control equipment must be operated and maintained in conformance with all manufacturer's specifications and recommendations to prevent the violation of any emission limitation.
- e. Red Arrow Products Company shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution.
- f. Red Arrow Products Company shall restrict the waste combusted by the thermal oxidizer here permitted to fuels comparable to the wood tar, or odorous gaseous compounds generated at the Red arrow Products manufacturing facility on South Water Street. The combustion of other fuels must receive written authorization from the Department prior to any such change in burner operation.
- g. The three control devices (packed tower, condenser and plate tower), which are part of the pyrolysis process and are used in series to collect product (liquid smoke) and capture particulates, shall be operated at all the times during the production of liquid smoke. This condition is necessary to meet the particulate emission limits.
- h. Compliance emission tests shall be conducted within 45 days after the start of initial operation to demonstrate compliance with the NO_x, VOC, formaldehyde

and CO emissions on the new thermal oxidizer inlet and outlet while operating at 100% capacity. If operation at 100% capacity is not feasible, the source shall operate at a capacity level which is approved by the Department in writing. If the compliance emission tests cannot be conducted within 45 days after the start of initial operation, the permit holder may request and the Department may approve in writing an extension of time to conduct the test(s). The Department shall be informed at least 20 working days prior to the tests so a Department representative can witness the testing. At the time of notification a compliance test plan following the provisions set forth in Section NR 439.07, Wis. Adm. Code, shall also be submitted for approval.

Two copies of the report on the tests shall be submitted to the Department for evaluation within 60 days after the tests. An operating permit will be issued only upon proof of compliance.

B. Process #P03, Stack #14, Dry Product Process

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Particulate	sec. 144.394(3), Wis. Stats.	0.093 pound per hour See Note 1
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity
Hazardous Emissions	sec. NR 445.03, Wis. Adm. Code	General limitations See Note 2
Malodorous Emissions	sec. NR 429.03, Wis. Adm. Code	General Limitations See Note 3
Organic Compounds	sec. NR 419.03, Wis. Adm. Code	General Limitations See Note 4

Note 1

The applicable limitation for this source is set forth in sec. NR 415.05(1)(m), Wis. Adm. Code and is 0.20 pounds of particulate matter per 1,000 pounds of gas or sec. NR 415.05(2), Wis. Adm. Code and is $E = 3.59 P^{0.62}$. (The more restrictive of the two applies). This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

Note 2

No person may cause, or allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration or durations to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 4 of sec. NR 445.04, Wis. Adm. Code

Note 3

No person shall cause, suffer, allow, or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate, or control such emissions.

Note 4

No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvent or mixtures.

2. Other Conditions

- a. Red Arrow products Company shall monitor and record on a daily basis the pressure drop range across the baghouse. The pressure drop range across the baghouse shall be maintained at 1-6 inches w.g.
- b. Red Arrow Products Company shall keep the records required in permit conditions 2 a. for a period of three years and the records be made available to the Department personnel anytime during normal working hours.
- c. All the air pollution control equipment must be operated and maintained in conformance with all manufacturer's specifications and recommendations to prevent the violation of any emission limitation.
- d. Red Arrow Products Company, shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution.

C. Process #P04, Stack #15, LFB Process

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity
Hazardous Emissions	sec. NR 445.03, Wis. Adm. Code	General limitations See Note 1
Malodorous Emissions	sec. NR 429.03, Wis. Adm. Code	General Limitations See Note 2
Organic Compounds	sec. NR 419.03, Wis. Adm. Code	General Limitations See Note 3

Note 1

No person may cause, or allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration or durations to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 4 of sec. NR 445.04, Wis. Adm. Code

Note 2

No person shall cause, suffer, allow, or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate, or control such emissions.

Note 3

No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvent or mixtures.

D. Process #P05, Stack #16, The Grillin Process

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Particulate	sec. 144.394(3), Wis. Stats.	0.01 pound per hour See Note 1
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity
Hazardous Emissions	sec. NR 445.03, Wis. Adm. Code	General limitations See Note 2
Malodorous Emissions	sec. NR 429.03, Wis. Adm. Code	General Limitations See Note 3
Organic Compounds	sec. NR 419.03, Wis. Adm. Code	General Limitations See Note 4

Note 1

The applicable limitation for this source is set forth in sec. NR 415.05(1)(m), Wis. Adm. Code and is 0.20 pounds of particulate matter per 1,000 pounds of gas or sec. NR 415.05(2), Wis. Adm. Code and is $E = 3.59 P^{0.62}$. (The more restrictive of the two applies). This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

Note 2

No person may cause, or allow, or permit emissions into the ambient air of any hazardous substance in such quantity, concentration or durations to be injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables 1 to 4 of sec. NR 445.04, Wis. Adm. Code

Note 3

No person shall cause, suffer, allow, or permit emissions into the ambient air any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the Department are taken to abate, or control such emissions.

Note 4

No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvent or mixtures.

2. Other Conditions

- a. Red Arrow Products Company, shall monitor and record on a daily basis the temperature of the oxidation chamber for the afterburner. The minimum temperature of the oxidation chamber for the afterburner shall be at least 1400°F.
- b. Red Arrow Products Company shall keep the records required in permit conditions 2 a. for a period of three years and the records be made available to the Department personnel anytime during normal working hours.
- d. All the air pollution control equipment must be operated and maintained in conformance with all manufacturer's specifications and recommendations to prevent the violation of any emission limitation.
- e. Red Arrow Products Company, shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution.

E. Process #B03, Stack #17, Boiler

1. Categorical Emission Limitations

<u>Pollutant</u>	<u>Applicable Wis. Adm. Code or Wis. Statute</u>	<u>Limitation/Requirement</u>
Particulate	sec. 144.394(3), Wis. Stats.	0.04 pound per hour See Note 1
Nitrogen Oxides	sec. NR 428.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	2.38 pounds per hour
Carbon Monoxide	sec. NR 426.03, Wis. Adm. Code & sec. 144.394(6), Wis. Stats.	0.60 pound per hour
Visible Emissions	sec. NR 431.05, Wis. Adm. Code	20% Opacity

Note 1

The applicable limitation for this source is set forth in sec. NR 415.06(2)(b), Wis. Adm. Code and is 0.50 pounds of particulate per million BTU heat input. This limitation allows an emission rate which may violate a particulate matter Ambient Air Quality Standards. Therefore under the authority granted in sec. 144.394(3), Wis. Stats., the emission rate has been set at maximum emission rate expected so that it does not cause or exacerbate the violation of a particulate matter Ambient Air Quality Standard.

F. GENERAL CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

1. The permittee shall inform the Wisconsin Department of Natural Resources, Lake Michigan District, 1125 North Military Avenue, Green Bay, WI 54307 in writing of the following for each emissions unit covered in this permit:
 - a. Notice of commencing modification shall be submitted within 15 days of the start of modification.
 - b. Notice of intent to initially operate the source(s) covered by this permit, 30 days prior to the anticipated date of initial operation.
 - c. Notice of the actual date of initial startup shall be submitted within 15 days of the initial startup.
2. Expiration of this Construction Permit

This construction permit expires in 18 months after the effective date of this permit. Construction and initial operation of each emissions unit covered in this permit, for equipment shake-down, testing and Department evaluation of operation to assure conformity with the permit conditions. Please note that the sources covered by this permit are required to meet all emission limits and special conditions contained in the permit at all times, including during the initial operation period. If 18 months is an insufficient time period for equipment shakedown, testing and Department evaluation of operation, the construction permit holder may request and the Department may approve in writing an extension of the initial operation period. Operation of the

source(s) covered by this permit after this construction permit expires is prohibited until an operating permit for the source(s) has been issued by the Department. The application submitted on May 19, 1992 and deemed complete after November 18, 1992 will be processed as an application for an operation permit.

3. Whenever Emission testing is required by the Department, the following test methods shall be employed:
 - a. Compliance with particulate emission limits shall be determined by U.S. EPA Method 5 including backhalf.
 - b. Compliance with sulfur dioxide emission limits shall be determined by U.S. EPA Method 24.
 - c. Compliance with total organic compound emission limits shall be determined by U.S. EPA Method 25.
 - d. Compliance with carbon monoxide emission limits shall be determined by U.S. EPA Method 10.
 - e. Compliance with nitrogen compound emission limits shall be determined by U.S. EPA Method 7.
 - f. Compliance with visible emission limits shall be determined by U.S. EPA Method 9.
 - g. Compliance with formaldehyde emission limits shall be determined by U.S. EPA Method 0011.

PART II
GENERAL CONSTRUCTION PERMIT CONDITIONS
FOR DIRECT STATIONARY SOURCES

A. Scope

This permit is valid only for the structure, building, facility, equipment or operation specifically identified herein. All emissions authorized hereby shall be consistent with the terms and conditions of Parts I and II of this permit.

B. Prevention of Air Pollution

No person may cause, allow or permit the emissions of any air contaminant into the ambient air from a source subject to this permit which substantially contribute to the exceeding of an air standard or which cause air pollution.

C. Notification Requirements

Pursuant to sec. 144.394(3), Wis. Stats., and sections NR 445.08 and 439.03(4), Wisconsin Administrative Code, the Department shall be notified of the following events:

Event

Timing

Hazardous substance air spill

Immediate call: 608/266-3232

Malfunction or event not reported in advance which causes or may cause any violation of an emission limitation.

Within one business day of onset.

Noncompliance with any other condition specified in this permit.

Written notification within 5 days identifying noncompliance, cause, duration, and steps taken to prevent reoccurrence.

D. Advance Notice of Startup or Shutdown

The permittee shall report to the Department in advance schedules for planned shutdown and startup of air pollution control equipment and the measures to be taken to minimize the down time of the control equipment. Scheduled maintenance or startup of other equipment which causes an emission limit to be exceeded shall also be reported in advance to the Department. Advance reporting pursuant to this permit condition or sec. NR 439.03(6), Wisconsin Administrative Code, shall not relieve any person from the duty to comply with any applicable emission limitations.

E. Right of Entry

Pursuant to secs. 144.31(2)(f) and 144.34, Wis. Stats., the permittee shall allow authorized representatives of the Department of Natural Resources to enter upon the permittee's premises; to have access to and copy any records required to be kept under the terms and conditions of this permit; and to make any inspection necessary to ascertain compliance.

F. Malfunction Prevention and Abatement Plans

Pursuant to sec. NR 439.11, Wis. Adm. Code, the owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any hour of carbon monoxide, particulate matter, hydrocarbons, sulfur oxides, nitrogen dioxide or photochemical oxidants shall prepare a written malfunction prevention and abatement plan to prevent, detect, and correct malfunctions or equipment failures which may cause any emission limitation to be violated or which may cause air pollution. Any such plan shall be carried out by the owner or operator. The plan shall be updated as needed and is subject to Department review, approval, and amendment.

G. Emission Control Action Plan

Pursuant to sec. NR 493.04, Wis. Adm. Code, if the source(s) covered by this permit emits 0.25 tons per day or more of carbon monoxide, particulate matter, hydrocarbons, sulfur oxides, nitrogen dioxide or photochemical oxidants, the permittee shall prepare an emission control action program consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an air pollution alert, air pollution warning or air pollution emergency. The emission control action program shall be in writing, available on the premises for inspection and subject to review and approval by the Department on request.

H. Permit Alteration, Revocation, Suspension

After notice and opportunity for a hearing, as provided in sec. 144.395, Wis. Stats., this permit may be altered, suspended, or revoked, in whole or in part, for cause. Note: These statutes expire on July 1, 1993 and are to be replaced with rules. Circumstances which could result in alteration of the permit include, but are not limited to, the following:

1. A significant or recurring violation of any term or condition of this permit;
2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
3. A change in any applicable rule, emission limitation, ambient air quality standard, or ambient air quality increment.
4. An election by the permit holder to meet more stringent emission limitations.

S. Criminal Penalties

In addition to the other penalties or remedies, sec. 144.426(2), Wis. Stats., provide that any person who intentionally commits an act that violates or fails to perform an act required by this permit shall be fined not more than \$25,000 per day of violation or imprisoned for not more than 6 months or both. When there has been a previous conviction under sec. 144.426(2), Wis. Stats., the person shall be fined not more than \$50,000 per day of violation or imprisoned for not more than 2 years or both.

T. Payment of Application Fee

Sources which are required under chapter NR 410, Wis. Adm. Code and sec. 144.399, Wis. Stats., to pay an application fee shall pay the fee within thirty days of the date of the billing statement. The Department may not issue the release for permanent operation of the source until the Department receives full payment of the application fee.

U. Annual Emission Fee

Pursuant to sec. 144.399, Wis. Stats., any person who owns or operates an air contaminant source for which an air pollution control operation permit is required shall pay an annual fee. This is a construction permit. This source will require an operation permit before the construction permit expires.